November-12-12 3:30:26 PM

92931

Page 1

Item ID: 649.4814 Accept *N900040100* Setup Start **Revision ID:** Item Name: Doubler **Start Date: Start Qty: 20.00** *20* 12/11/2012 **Cust Item ID: Required Date:** 03/12/2012 Req'd Qty: 20.00 *20* **Customer:** Reference: Run **Process Plan:** Approvals: Date: |2-1| - 13 Tooling: Date: QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool# Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Code **Qty** Qty Stamp Number **Draw Nbr Revision Nbr** 649.4800 Α 110 0.00 *110* 54) 1B12-(1-17 Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg JO34 . 1745 Prog Rev: 2-Deburr if necessary 120 QC2- Inspect parts off machine FAI/FAIB 0.00 *120* 132-11-17 QC 0.00 Memo Quality Control

											DQA:	Dat	e:	•
NCR:	res /	No				WORK ORDER NON-O	100	NFORM	AANCE / UPDATE		•		_	
	, ,								·		QA Closed:	Dat	e:	
Marie Ond						DISPOSITION		•	AGAIN:	ST DE	PARTMENT/	PROCESS		
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Part I	···.					Scrap Use-as-is	1		noforming Finishi			e/Packaging	\dashv	Other
NCR I	No.					Work Order Update			Large Fab Composi	· —	Nec/3toi	Supplier	\dashv	Ottlei
Nen	···—					Work Order opudie	J		composi	"	j	Supplier		!
Root					Descri	ption of work order update		nitial	Action		Sign &		\Box	
Cause		ate	Step	Qty	,	or Non-conformance	Ch	ief Eng	Description		Date	Verification	1	QC Inspector
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Equip/Tooling		ĺ											ļ	
Operator														
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!	Cra	cks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct [Weld
	Cru	ished/C	rimped.			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cut	fs				Contamination		Mainte	nance		Part Moved	-		

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

November-12-12 3:30:26 PM

Required Date: 03/12/2012

Accept

92931

N900040100

Setup Start

Item Name: Start Date:

Revision ID:

Item ID:

Doubler 12/11/2012

649.4814

Start Qty: 20.00

Reg'd Qty: 20.00

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals: **Process Plan:** Date:

Tooling:

Date:

Run

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

130

Operation Description

Set Up/ Run Hours Tool # Plan

Accept Code Oty

Reject Qty

Reject Insp. Number Stamp

130

QC Quality Control

Memo

QC8- Inspect parts - second check

160

Outsource process-Anodize per QSI017 4.1.10.1

0.00

160

Outsource4

Memo

0.00

Outsource process - Anodize

ISSUE P/O: 18506

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

170

Receive & Inspect for Damage & Mat'l Certs

0.00

170

Packaging

Memo

0.00

Packaging

												DQA:	Date:	•
NCR:	⁄es	/ No					WORK ORDER NON-C	100	VFORM	MANCE / UPI	DATE	•		
												QA Closed:	Date:	
Nork Ord	ar.					1	DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
WOLK OLU	: 1.		· ·			١	Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part I	No.					١	Scrap			Machining	Small Fab	Prod	l. Eng. Coor.	Quality
						1	Use-as-is			noforming	Finishing	4	e/Packaging	Other
NCR I	٧o.						Work Order Update			Large Fab	Composite]	Supplier	
				,										
Root		_	_	_	Desc	•	tion of work order update	ļ	nitial	i	ion	Sign &		
Cause		Date	Step	Qty		0	r Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Inspector
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		Cracks			F	_	Broken/Damaged		1	ion Incomplete	_	Part Incorred	 	Weld
		Crushed/C	Crimped.		-	-4	Burrs	-	4	ions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs			-	\dashv	Contamination	-	Mainte		<u> </u>	Part Moved		
		Heat Treat		Tuba	<u> </u>	\dashv	Countersink Cut Too Short	\vdash	Mislabe		 	Positioned V		Joshan
		Inspection Ripples in		rube	-		Drill Holes	-	Misread Offset	,	L	Power Loss/	surge	Other
		Torque W		vtrucio	, ⊦		Drawing	-	1	Calibration				
		Turning Se		.ALI USIOI	' -		Finish	\vdash	4	Sequence				
	-	Wave/Twi	•	ne	-	_	Folio	-	1	Dimensions				
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November-12-12 3:30:26 PM

Quality Control

Page 3

Item ID: 649.4814 Accept *N900040100* Setup Start **Revision ID:** Item Name: Doubler **Start Date: Start Qty: 20.00** 12/11/2012 **Cust Item ID: Required Date:** 03/12/2012 Req'd Qty: 20.00 **Customer:** Reference: Run Approvals: Process Plan: Date: **Tooling:** Date: QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Reject Accept Insp. **Work Center ID Description** Run Hours Code Qty Oty Number Stamp 180 QC5- inspect part completeness to step on W/O 0.00 *180* 0.00 Memo Quality Control 190 0.00 *190* 24 SprayPaint 0.00 Memo **Spray Painting** PRIME IAW MIL-P-23377J TYPE1 CLASS N AS PER DWG. (SEE NOTE 2) PRIMER BATCH: 123693 200 QC14- Inspect Spray Paint 0.00 *200* 0.00 Memo

NCR: Ye	es / No ::			WORK ORDER NON- DISPOSITION Rework	CONFOR	· 		osed: Da	ite: Engineering
Part No				Scrap Use-as-is Work Order Update		Machining moforming	Small Fab	Prod. Eng. Coor. c/Store/Packaging Supplier	Quality Other
Root	·			Description of work order update	Initial	Action		· · ·	
cause oc/Data quip/Tooling perator Material etup other rocess upplier raining napproved	Date	Step	Qty	or Non-conformance	Chief Eng		tion Da	te Verificatio	n QC Inspector
l andina					FAULT CATE	GORY			
Landing	Bending Centre N Cracks Crushed Cuffs Heat Tre Inspection Ripples in Torque N	lot Concer /Crimped eat on Strip in	Tube extrusion	Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes	Instructure Maint Mislab Misrea Offset Out of Out of	tion Incomplete tions Incomplete/Unc enance eled	Part In Part Lo Part M Positio	Under tolerance accorrect post/Missing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

92931

Page 4

November-12-12 3:30:26 PM Item ID: 649.4814 Accept *N900040100* Setup Start **Revision ID:** Item Name: Doubler **Start Date:** 12/11/2012 Start Qty: 20.00 **Cust Item ID: Required Date:** 03/12/2012 Reg'd Oty: 20.00 *20* **Customer:** Reference: Run Process Plan: Approvals: Date: **Tooling:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description **Run Hours** Number Stamp Code Qty Qty Identify as per dwg & Stock Location: 139 H 210 0.00 *210* Packaging 0.00 Memo ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV*** Packaging 220 QC21- Final Inspection - Work Order Release 0.00

Memo

0.00

Quality Control

13/1/10 St MF 09

NCR:	Yes /	No.
INCIA.	153 /	140

Date:

DQA:

NCR:	Yes	/ No					WORK ORDER NON-C		NFORN	//ANCE / UP	PDATE			
												QA Closed:	Date:	
Work Ord	or.						DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
Part 1							Rework Scrap			Skid-tube Machining	Crosstube Small Fab	Proc	Water Jet	Engineering Quality
NCR I	No.						Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Stor	e/Packaging Supplier	Other
Root					Des	crip	otion of work order update		nitial	Ac	ction	Sign &		
Cause		Date	Step	Qty		C	or Non-conformance	Ch	ief Eng	Desc	cription	Date	Verification	QC Inspector
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		Centre No	ot Concer	ntric to	o/s		BOM/Route	\sqsubseteq	Hardwa			Over/Under	 	Temperature/Cure
	_	Cracks					Broken/Damaged		ł	on Incomplete	_	Part Incorred	⊢	Weld
		Crushed/0	Crimped.				Burrs		1	ions Incomplete,	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs			-		Contamination		Mainte	nance		Part Moved		
		Heat Trea	it				Countersink	L	Mislabe	led		Positioned V	/rong	7
		Inspection	•	Tube			Cut Too Short	$ldsymbol{le}}}}}}$	Misread	I		Power Loss/	Surge	Other
		Ripples in					Drill Holes	<u></u>	Offset					
		Torque W			n		Drawing		ł	Calibration				
		Turning S					Finish		1	equence				
	l	Wave/Tw	ist in Tub	e			Folio		Outside	Dimensions				

Picklist Print

November-12-12 3:30:30 PM

Work Order ID: 92931

92931

Parent Item:

649.4814

649 4814

Parent Item Name: Doubler

Start Date: 12/11/2012

Required Date: 03/12/2012

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP REV:A 12.11.01 NEW ISSUE DD VERF:JLM

	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	 Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
1.	M2024T3S.125		Purchased	No .	110	sf	32.0000	0.0156	0.328421	1		
	N/202/T2	C 105						44	0.520421	B	12-4-	17

M//U/4135 1/5

2024-T3 .125 sheet

Location Loc Qty Loc Code MAT022 32 123096 32

										DQA:	Date:	
NCR:	res / No				WORK ORDER NON-C	CON	NFORM	MANCE / UPD	DATE	·		•
	·							•		QA Closed:	Date:	
Work Orde	ar.				DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
WOIK Olde	=1.				Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	Vo.				Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
				 	Use-as-is			noforming	Finishing	4	re/Packaging	Other
NCR I	No.				Work Order Update			Large Fab	Composite	1	Supplier	†
										-		<u> </u>
Root				Descri	ption of work order update	ı	nitial	Acti	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator										•		
Material		1										
Setup												
Other								:				
Process												
Supplier												
Training												
Unapproved												<u> </u>
					F,	AUL	T CATE	GORY				
Landi	ng Gear			<u>,</u>	General		i			-		7
	Bending				Bend		Grain		<u> </u>	Ovalized		Pressure/Forced
	Centre N	ot Conce	ntric to	O/S	BOM/Route		Hardwa	re	<u> </u>	Over/Under		Temperature/Cure
	Cracks			<u></u>	Broken/Damaged	\vdash	1	on Incomplete		Part Incorre	ct	Weld
	Crushed/	Crimped.		L	Burrs	Ш	Instruct	ions Incomplete/L	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination	Ш	Mainte	nance		Part Moved		
	Heat Trea	at			Countersink		Mislabe	led		Positioned V	Vrong	

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

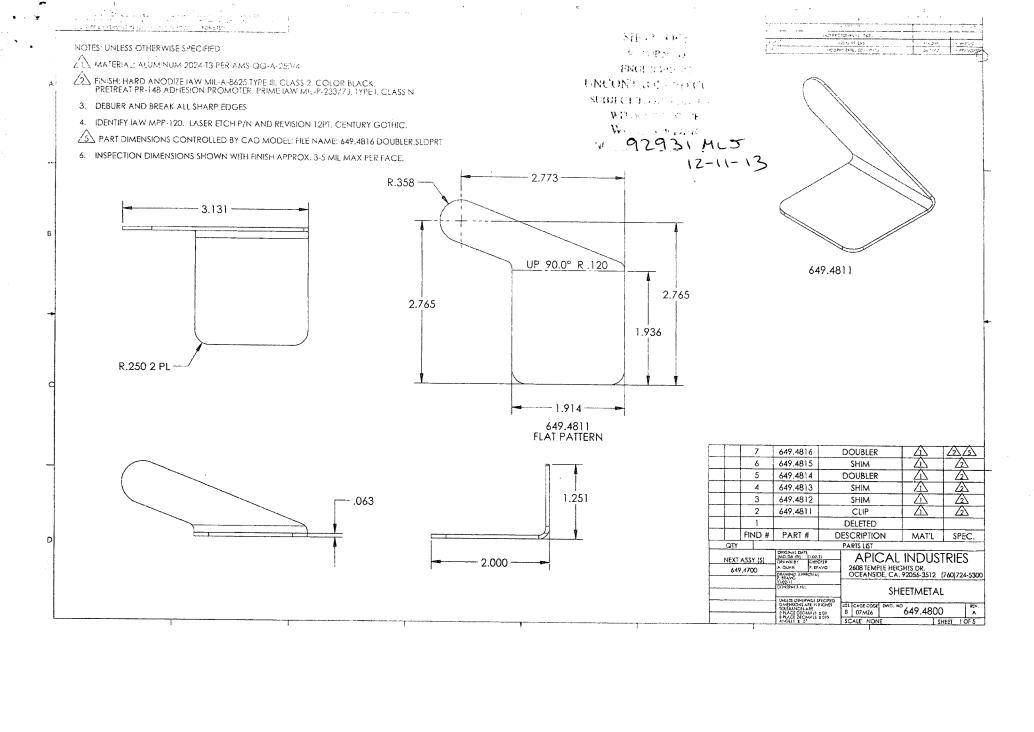
Drill Holes

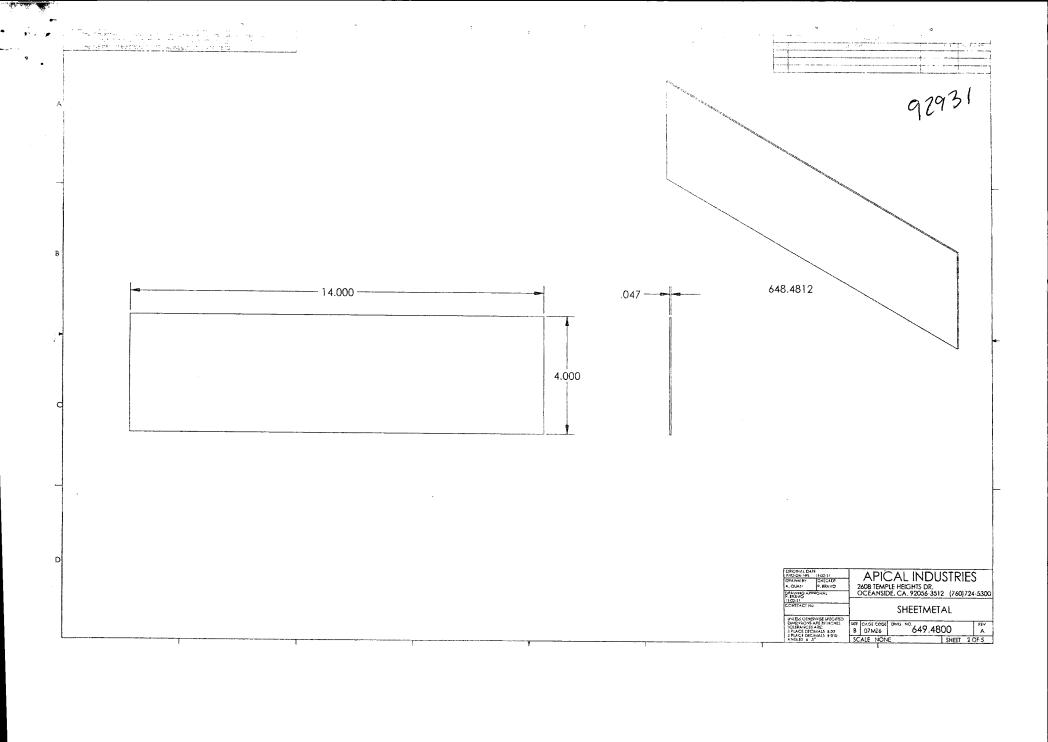
Drawing

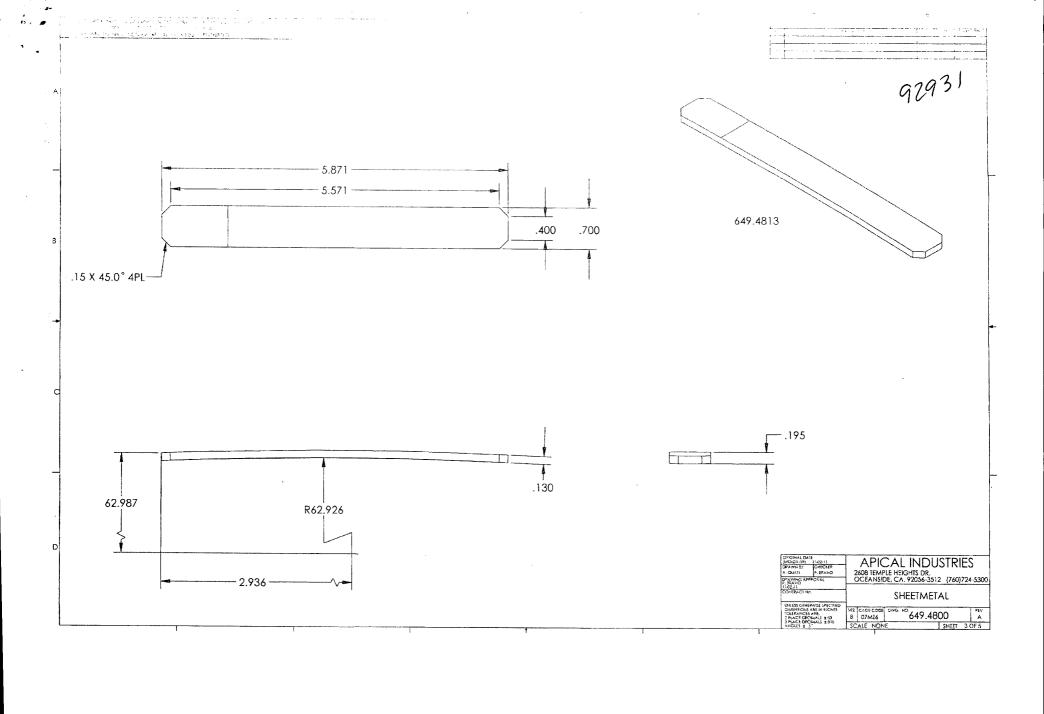
Finish

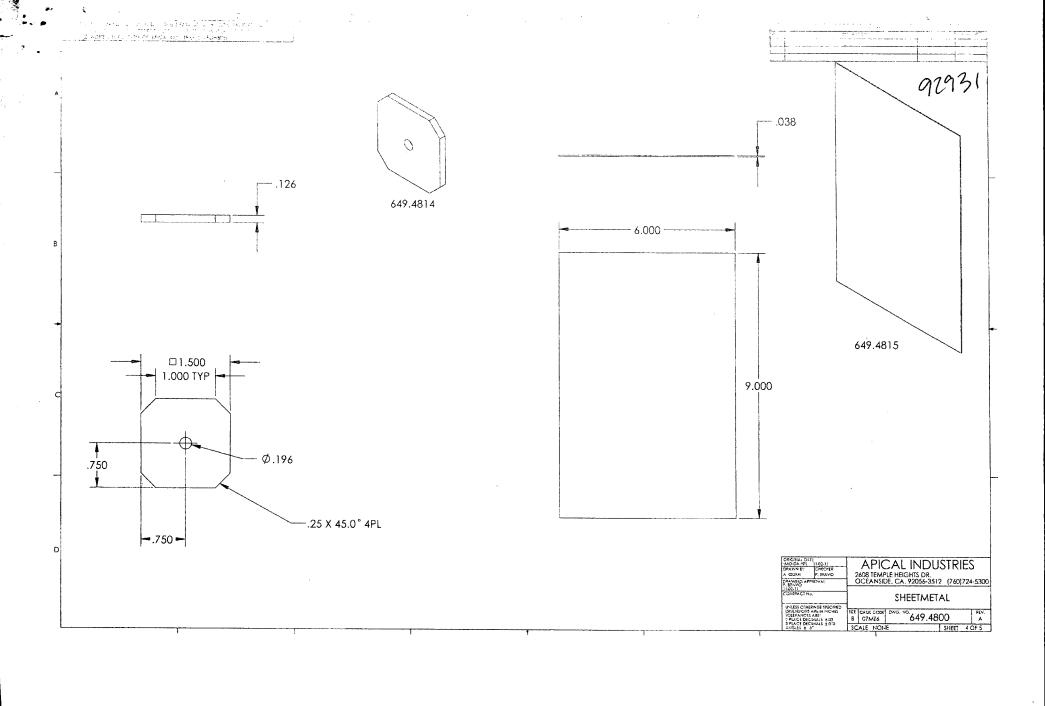
Folio

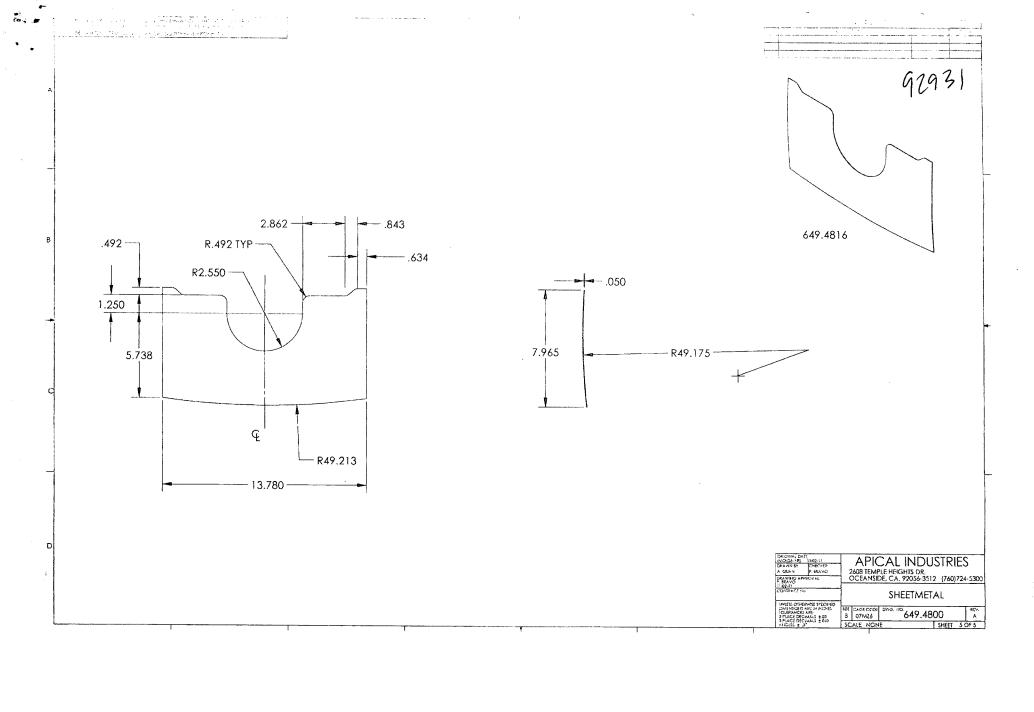
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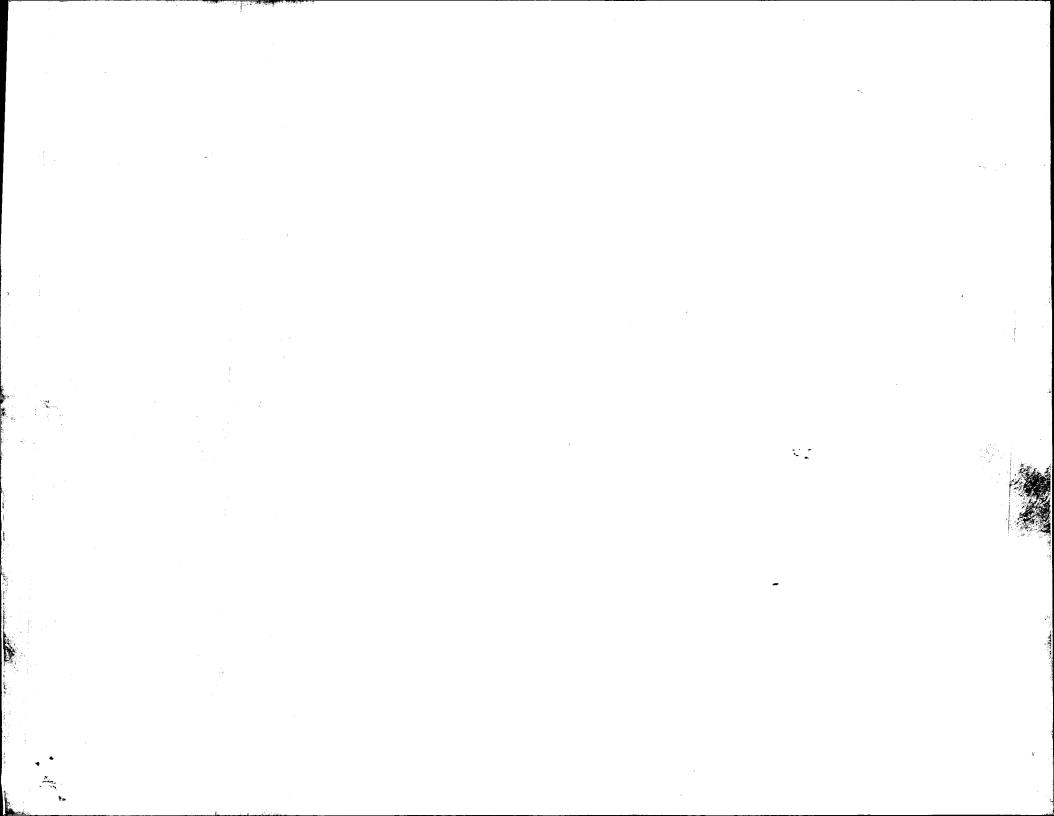
DART AEROSPACE LTD	Work Order:	92931
Description: Double 1	Part Number:	649-4814
Inspection Dwg: 649-484 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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1500	4 004	1.504	2		ν	
150	7 .005	727	2		V	
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Measured by:	iB	Audited by:	15	F	Preliminary Approval:	
Date:	(2-11-17)	Date:	12/11/9		Date:	

Rev	Date	Change		Revised by	Approved
E	10.04.14	Added preliminary approval	 <u>January</u>	KJ	





A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62107

Date: 12-Dec-12

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

ms	200 Fax: 613-632-118		613-632-5200	Fax: 613-632-1185
ns	<u> </u>	Ship Via		
Quantity	Description			
1	Part: ASST		Rev:	
lot			INGV.	
	8 PCS 647.1610			
	5 PCS 647.1612			
	2 PCS 647.1713			
	6 PCS 647.1811 1 PC 647.1816			
	PC 647.1817			
	8 PCS 647.1818			
	11 PCS 646.3210			
	20 PCS 646.3313	•		
	10 PCS 646.3717 20 PCS 646.3717			
	16 PCS 647.4610			
	10 PCS 649.4811			
	10 PCS 649.4812			
(-	24 PCS 649.4814			
,	30 PCS 649:4815 6 PCS 647:7913			
	3 PCS 647.7919			
	10 PCS 647.9010		•	
	10 PCS 647.9011			
	15 PCS 647.9012			
	40 PCS 647.9013 60 PCS 646.9710			
	WO FCS 048.9710			
	HARD ANODIZE BLACK			
	MIL-A-8625 TYPE III CLASS 2			
	Job: 20120768	PO: PO18506	Line:	
	Certificate of Co	onformance		
	A.T.G. Industries certifies that all items	s in this shipment are in co	nformance	
	with all requirements, specifications ar	nd drawings referenced in t	he purchase order.	
	ISO 9001 : 2008 RE ATG SALES-2010 T			•
		ENIVIO AFFLI		7
	DATE: 12/12/12			
	<u> </u>			All I
		Page 1 of 2	t:	



A.T.G. Industries Inc. 731 rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62107

Date: 12-Dec-12

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DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

		Fax. 013-032-1		PII. 013-032-3200	
rms			Ship Via		
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		11	<u> </u>		
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